**[](http://www.calculate.org.au/)[](http://www.amsi.org.au)MATHEMATICS SCOPE AND SEQUENCE AUDIT: Year 5**

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| **NUMBER AND ALGEBRA** | | **TIMES** | **SAM** | **Term 1** | **Term 2** | **Term 3** | **Term 4** |
| Number & Place Value | [Identify and describe factors and multiples of whole numbers and use them to solve problems (ACMNA098)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=NA&layout=1) |  |  |  |  |  |  |
|  | [Use estimation and rounding to check the reasonableness of answers to calculations(ACMNA099)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=NA&layout=1) |  |  |  |  |  |  |
|  | [Solve problems involving multiplication of large numbers by one- or two-digit numbers using efficient mental, written strategies and appropriate digital technologies(ACMNA100)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=NA&layout=1) | [***TIMESNA9***](http://www.amsi.org.au/teacher_modules/multiplication_of_whole_numbers.html) |  |  |  |  |  |
|  | [Solve problems involving division by a one digit number, including those that result in a remainder (ACMNA101)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=NA&layout=1) | [***TIMESNA10***](http://www.amsi.org.au/teacher_modules/division_of_whole_numbers.html) |  |  |  |  |  |
|  | [Use efficient mental and written strategies and apply appropriate digital technologies to solve problems (ACMNA291)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=NA&layout=1) | [***TIMESNA07***](http://www.amsi.org.au/teacher_modules/addition_of_whole_numbers.html)[***TIMESNA08***](http://amsi.org.au/teacher_modules/Subtraction_of_whole_numbers.html)  [***TIMESNA09***](http://www.amsi.org.au/teacher_modules/multiplication_of_whole_numbers.html) |  |  |  |  |  |
| Fractions & Decimals | [Compare and order common unit fractions and locate and represent them on a number line (ACMNA102)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=NA&layout=1) | [***TIMESNA14***](http://amsi.org.au/teacher_modules/fractions.html) |  |  |  |  |  |
|  | [Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator (ACMNA103)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=NA&layout=1) | [***TIMESNA14***](http://amsi.org.au/teacher_modules/fractions.html) |  |  |  |  |  |
|  | [Recognise that the place value system can be extended beyond hundredths(ACMNA104)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=NA&layout=1) | [***TIMESNA18***](http://www.amsi.org.au/teacher_modules/decimals_and_percentages.html) |  |  |  |  |  |
|  | [Compare, order and represent decimals (ACMNA105)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=NA&layout=1) | [***TIMESNA18***](http://www.amsi.org.au/teacher_modules/decimals_and_percentages.html) |  |  |  |  |  |
| Money & Financial Maths | [Create simple financial plans (ACMNA106)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=NA&layout=1) |  |  |  |  |  |  |
| Patterns & Algebra | [Describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction (ACMNA107)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=NA&layout=1) |  |  |  |  |  |  |
|  | [Use equivalent number sentences involving multiplication and division to find unknown quantities (ACMNA121)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=NA&layout=1) |  |  |  |  |  |  |
| **MEASUREMENT AND GEOMETRY** | |  |  |  |  |  |  |
| Using Units of Measurement | [Choose appropriate units of measurement for length, area, volume, capacity and mass(ACMMG108)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=MG&layout=1) |  | [***(SAMMYMG03)***](http://www.amsi.org.au/ESA_middle_years/Year5/Year5_md/Year5_1c.html#intro) |  |  |  |  |
|  | [Calculate the perimeter and area of rectangles using familiar metric units (ACMMG109)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=MG&layout=1) |  |  |  |  |  |  |
|  | [Compare 12- and 24-hour time systems and convert between them (ACMMG110)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=MG&layout=1) | [***TIMESMG03***](http://www.amsi.org.au/teacher_modules/time.html) |  |  |  |  |  |
| Shape | [Connect three-dimensional objects with their nets and other two-dimensional representations (ACMMG111)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=MG&layout=1) |  |  |  |  |  |  |
| Location & Transformation | [Use a grid reference system to describe locations. Describe routes using landmarks and directional language (ACMMG113)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=MG&layout=1) |  |  |  |  |  |  |
|  | [Describe translations, reflections and rotations of two-dimensional shapes. Identify line and rotational symmetries (ACMMG114)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=MG&layout=1) |  |  |  |  |  |  |
|  | [Apply the enlargement transformation to familiar two dimensional shapes and explore the properties of the resulting image compared with the original (ACMMG115)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=MG&layout=1) |  | [***(SAMMYMG02)***](http://www.amsi.org.au/ESA_middle_years/Year5/Year5_md/Year5_1b.html#intro) |  |  |  |  |
| Geometric Reasoning | [Estimate, measure and compare angles using degrees. Construct angles using a protractor (ACMMG112)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=MG&layout=1) |  | [***(SAMMYMG01)***](http://www.amsi.org.au/ESA_middle_years/Year5/Year5_md/Year5_1a.html#intro) |  |  |  |  |
| **STATISTICS AND PROBABILITY** | |  |  |  |  |  |  |
| Chance | [List outcomes of chance experiments involving equally likely outcomes and represent probabilities of those outcomes using fractions (ACMSP116)](Year%205.docx) | [***TIMESSP10***](http://www.amsi.org.au/teacher_modules/Chance_year_5.html) | [(***SAMMYSP01)***](http://www.amsi.org.au/ESA_middle_years/Year5/Year5_md/Year5_2a.html#intro) |  |  |  |  |
|  | [Recognise that probabilities range from 0 to 1 (ACMSP117)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=SP&layout=1) | [***TIMESSP10***](http://www.amsi.org.au/teacher_modules/Chance_year_5.html) | [(***SAMMYSP01)***](http://www.amsi.org.au/ESA_middle_years/Year5/Year5_md/Year5_2a.html#intro) |  |  |  |  |
| Data Representation & Interpretation | [Pose questions and collect categorical or numerical data by observation or survey(ACMSP118)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=SP&layout=1) | [***TIMESSP03***](http://www.amsi.org.au/teacher_modules/Data_Investigation_and_interpretation5.html) |  |  |  |  |  |
|  | [Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies (ACMSP119)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=SP&layout=1) | [***TIMESSP03***](http://www.amsi.org.au/teacher_modules/Data_Investigation_and_interpretation5.html) |  |  |  |  |  |
|  | [Describe and interpret different data sets in context (ACMSP120)](http://www.australiancurriculum.edu.au/mathematics/curriculum/f-10?y=5&s=SP&layout=1) | [***TIMESSP03***](http://www.amsi.org.au/teacher_modules/Data_Investigation_and_interpretation5.html) |  |  |  |  |  |
| **PROFICIENCIES (Embedded Throughout)** | | **Keywords** | | | | | |
| [**Understanding**](file:///D:\Users\mconnor\Documents\Resources\AMSI%20School%20Program%20Implementation\AMSI%20Teacher%20Journal%20Master\2015%20Audit%20Docs\Proficiency%20Summaries\Understanding%20Statements%20and%20Keywords.docx) | includes making connections between representations of numbers, using fractions to represent probabilities, comparing and ordering fractions and decimals and representing them in various ways, describing transformations and identifying line and rotational symmetry | Making connections, noticing properties, manipulating according to properties, identifying and describing relationships | | | | | |
| [**Fluency**](file:///D:\Users\mconnor\Documents\Resources\AMSI%20School%20Program%20Implementation\AMSI%20Teacher%20Journal%20Master\2015%20Audit%20Docs\Proficiency%20Summaries\Fluency%20Statements%20and%20Keywords.docx) | includes choosing appropriate units of measurement for calculation of perimeter and area, using estimation to check the reasonableness of answers to calculations and using instruments to measure angles | Choosing appropriate units, estimating, using appropriate instruments | | | | | |
| [**Problem Solving**](file:///D:\Users\mconnor\Documents\Resources\AMSI%20School%20Program%20Implementation\AMSI%20Teacher%20Journal%20Master\2015%20Audit%20Docs\Proficiency%20Summaries\Problem%20Solving%20Statements%20and%20Keywords.docx) | includes formulating and solving authentic problems using whole numbers and measurements and creating financial plans | Formulate, | | | | | |
| [**Reasoning**](file:///D:\Users\mconnor\Documents\Resources\AMSI%20School%20Program%20Implementation\AMSI%20Teacher%20Journal%20Master\2015%20Audit%20Docs\Proficiency%20Summaries\Reasoning%20Statements%20and%20Keywords.docx) | includes investigating strategies to perform calculations efficiently, continuing patterns involving fractions and decimals, interpreting results of chance experiments,  posing appropriate questions for data investigations and interpreting data sets | Investigating, continuing, interpreting, questioning | | | | | |